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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/581,924  
Filing Date: June 07, 2006  
Appellant(s): MAZERIS, FERNANDO

\_\_\_\_\_  
Roland E. Long, Jr.  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 10/28/2011 appealing from the Office action mailed 4/28/2011.

**(1) Real Party in Interest**

The examiner has no comment on the statement, or lack of statement, identifying by name the real party in interest in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The following is a list of claims that are rejected and pending in the application:

Claims 1-4,6-24,26-54 are rejected and pending.

**(4) Status of Amendments After Final**

The examiner has no comment on the appellant's statement of the status of amendments after final rejection contained in the brief.

**(5) Summary of Claimed Subject Matter**

The examiner has no comment on the summary of claimed subject matter contained in the brief.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The examiner has no comment on the appellant's statement of the grounds of rejection to be reviewed on appeal. Every ground of rejection set forth in the Office action from which the appeal is taken (as modified by any advisory actions) is being maintained by the examiner except for the grounds of rejection (if any) listed under the

subheading "WITHDRAWN REJECTIONS." New grounds of rejection (if any) are provided under the subheading "NEW GROUNDS OF REJECTION."

**(7) Claims Appendix**

The examiner has no comment on the copy of the appealed claims contained in the Appendix to the appellant's brief.

**(8) Evidence Relied Upon**

2002/0120402	Burghardi et al.	8-2002
2003/0188689	Pratt	10-2003
2005/0000457	Beck	1-2005
7308866	Birk	12-2007
2003/0230245	Cheung	12-2003
6901369	Cureton et al.	5-2005

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1-3,6,7,10,11,13,14,17,20,21,23,24,26-30,34,37-40,43,48,50-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burghardi et al. (2002/0120402) in view of Pratt (2003/0188689).**

For claim 1, Burghardi et al. teach a feeding system for feeding animals on a farm, comprising: an analyzer device for measuring in real time or near real time an amount of at least one constituent of solid feed to be fed to said animals [0019][0020][0021]; a feeding device for feeding said animals [0020]; and a control device [0024][0025], wherein the amount of said constituent includes any one of a protein content, a fiber content, and a neutral detergent fiber (NDF) content [0038].

However, Burghardi et al. are silent about wherein the control device is configured to control the analyzer device to repeatedly measure the amount of the constituent of the solid feed at least once a day, and configured to control the feeding device to feed said animals repeatedly and at each instance based on the previous said repeatedly performed measurements.

Pratt teaches a feeding system comprising a control device (78) is configured to control an analyzer device to repeatedly measure the amount of the constituent of the solid feed at least once a day, and configured to control a feeding device to feed said animals repeatedly and at each instance based on the previous said repeatedly performed measurements [0131][0138][0153][023]. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the control device of Burghardi et al. be configured to control the analyzer device to repeatedly measure the amount of the constituent of the solid feed at least once a day, and configured to control the feeding device to feed said animals repeatedly and at each instance based on the previous said repeatedly performed measurements as taught by Pratt in order to provide updated data about the animal so as to provide appropriate

feed to the animal.

For claim 2, Burghardi et al. as modified by Pratt further teaches wherein the control device is configured to control said analyzer device to measure the amount of said constituent of said solid feed immediately prior to the feeding of said animals ([0018][0020][0021][0024][0025][0032]-[0036] of Burghardi).

For claim 3, Burghardi et al. as modified by Pratt further teaches wherein the control device is configured to control said analyzer device to measure the amount of said constituent of said solid feed a plurality of times per day (Pratt teaches).

For claim 6, Burghardi et al. as modified by Pratt further teaches wherein the control device is configured to control said analyzer device to measure the amounts of a plurality of constituents of said solid feed, and configured to control said feeding device to feed said animals depending on the measurements of the amounts of the constituents of said solid feed. [0038] of Burghardi et al.

For claim 7, Burghardi et al. as modified by Pratt further teaches wherein the control device is configured to control said feeding device to perform said feeding depending on an average value of said repeatedly measured amounts of said constituent. [0032] of Burghardi et al.

For claim 10, Burghardi et al. as modified by Pratt further teaches wherein the control device is a computer-based processing and control device provided for managing of said animals including controlling of the feeding of said animals, wherein said computer-based processing and control device includes: a database including updated information regarding feed consumption by said animals; is connected to

receive said respective measured amounts of said constituent of said solid feed; is provided to calculate an amount of solid feed to be fed to said animals based on the performed measurements and said updated information included in said database; and is connected to indicate to said feeding device said calculated amount of solid feed to be fed to said animals. [0024][0025][0032]-[0036][0043] of Burghardi et al.

For claim 11, Burghardi et al. as modified by Pratt further teaches wherein the control device is configured to control said feeding device to feed said animals with mixed solid feed having a balanced composition depending on the performed measurements. [0020][0021][0033][0037][0038] of Burghardi et al.

For claim 13, in addition to the above, Pratt further teaches wherein said animals are grouped in different groups, such that the control device is configured to control said feed device to feed different groups of animals with total mixed rations (TMR) of solid feed independently and in accordance with the performed measurements. [0140]-[0142][0184][0185][0232][0234][0236]. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the animals in the system of Burghardi et al. as modified by Pratt be grouped in different groups, such that the control device is configured to control said feed device to feed different groups of animals with total mixed rations (TMR) of solid feed independently and in accordance with the performed measurements as further taught by Pratt, in order to sort the animals with similar characteristics into groups for faster feeding so as to save time and money.

For claim 14, Burghardi et al. as modified by Pratt further teaches wherein said animals are grouped in different groups depending on body condition and, provided that

the animals are milking animals, depending on milk production, days in lactation, or number of lactations. [0142][0184][0185][0232][0234][0236][0243] of Pratt.

For claim 17, Burghardi et al. as modified by Pratt further teaches wherein the control device is configured to control said feed device to feed different individuals of said animals with solid feed individually depending on the performed measurements. Both Burghardi and Pratt teaches throughout their patents individual animal with different individual feed.

For claim 20, Burghardi et al. as modified by Pratt further teaches a weighing machine or an optical device with image processing capabilities, provided for establishing in connection with said feeding, the actual feed consumption by said animals, wherein the control device is configured to control said feeding device to feed said animals depending on the established actual feed consumption by said animals. [0020][0033][0036][0037][0042] of Burghardi et al.

For claim 21, Burghardi et al. as modified by Pratt further teaches wherein said animals are milking animals, further comprising a device provided for measuring a quality or a quantity of milk from said milking animals, and the control device is configured to control said feeding device to feed said milking animals depending on the measured quality or quantity of milk from said milking animals. [0016][0023][0031] of Burghardi et al.

For claim 23, Burghardi et al. as modified by Pratt further teaches wherein the control device is configured to control said analyzer device to measure the amount of the constituent of the solid feed repeatedly and at least once a day automatically. Pratt



teaches as stated above[0131][0138][0153][023].

For claim 24, Burghardi et al. as modified by Pratt further teaches wherein the control device is configured to control said feeding device to feed said animals repeatedly and at each instance depending on the last one of said repeatedly performed measurements automatically. Pratt teaches as stated above[0131][0138][0153][023].

For claims 26,27, the limitations have been explained in the above, thus, please see above.

For claim 28, Burghardi et al. as modified by Pratt are silent about wherein the control device is configured to control said analyzer device to measure the amount of said constituent of said solid feed at least three times per day. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the control device of Burghardi et al. as modified by Pratt be configured to control said analyzer device to measure the amount of said constituent of said solid feed at least three times per day, since it has been held that where routine testing and general experimental conditions are present, discovering the optimum or workable ranges until the desired effect is achieved involves only routine skill in the art. In re Aller, 105 USPQ 233.

For claims 29-30, Burghardi et al. as modified by Pratt further teaches wherein the analyzer device measures the amount of at least one constituent of solid feed to be feed to said animals at different locations in a feed supply device.  
[0020][0030][0037][0041] of Burghardi et al.

For claim 34, Burghardi et al. as modified by Pratt further teaches wherein the

analyzer device measures all of the constituents of the solid feed to provide more accurate ration balancing and maximized production. [0020][0021][0025][0032]-[0036][0038] of Burghardi et al.

For claim 37, see claim 2.

For claim 38, see claim 3.

For claim 39, see claim 28.

For claims 40 & 48, see claim 29.

For claim 43, see claim 34.

For claim 50, Burghardi et al. as modified by Pratt further teaches wherein different groups of animals are fed with total mixed rations of feed, independently, and at each instance, depending on the measured amount of the at least one constituent of solid feed. Pratt teaches the limitation as stated above for different groups.

For claim 51, Burghardi et al. as modified by Pratt further teaches wherein the measured constituent include any one of vitamins, minerals, moisture, fat, starch, TKN, crude fiber, acid detergent fiber (ADF), and lignin. [0038] of Burghardi et al.

For claim 52, Burghardi et al. as modified by Pratt further teaches wherein at least the animals, the analyzer device, and the feeding device are colocated. [0020] of Burghardi et al.

For claim 53, Burghardi et al. as modified by Pratt further teaches wherein at least the animals, the analyzer device, and the feeding device are in situ. [0020] of Burghardi et al.

For claim 54, Burghardi et al. as modified by Pratt further teaches wherein the

amount of the at least one constituent of the solid feed is measured and the animals are fed in real time in situ. [0020] of Burghardi et al.

**Claims 4,8,9,12,15,16,35,36,44-47 rejected under 35 U.S.C. 103(a) as being unpatentable over Burghardi et al. as modified by Pratt as applied to claims 1,26 above, and further in view of Beck (2005/0000457).**

For claim 4, Burghardi et al. as modified by Pratt are silent about wherein said solid feed is ensiled feed.

Beck teaches a feeding system comprising ensiled feed [0003]. It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ ensiled feed as taught by Beck as the preferred solid feed in the system of Burghardi et al. as modified by Pratt, depending on the user's preference due to availability of the feed.

For claims 8 & 9, Burghardi et al. as modified by Pratt are silent about wherein said analyzer device is a spectroscopic device for quantitative chemical analysis.

Beck teaches a feeding system for feeding animals wherein said analyzer device is a spectroscopic device/near infrared (NIR) instrument for quantitative chemical analysis ([0008][0039][0043]). It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ a spectroscopic device as taught by Beck in the system of Burghardi et al. as modified by Pratt, in order to provide a nondestructive, rapid, accurate and precise determination of the chemical composition of forages and feedstuffs for the animals.

For claim 12, Burghardi et al. as modified by Pratt and Beck further teaches

wherein the control device (of Burghardi) is configured to control said feeding device to feed said animals with solid feed having ensilage (of Beck) and concentrate and/or additives (of Burghardi) depending on the performed measurements.

For claim 15, Burghardi et al. as modified by Pratt and Beck further teaches wherein said animals have a supply of partial mixed rations (PMR) of solid feed, including ensilage and concentrate (of Beck), such that the control device (of Burghardi) is configured to control said feed device to feed each of said animals with additional concentrate feed individually (of Pratt) and in accordance on the performed measurements.

For claim 16., Burghardi et al. as modified by Pratt and Beck further teaches wherein said animals are grouped in different groups (of Pratt), such that the control device (of Burghardi) is configured to control said feed device to (i) feed different groups of animals with roughage or ensilage (of Beck) depending on the performed measurements (of Burghardi), and (ii) feed said animals with concentrate or additives (of Burghardi), individually and in accordance on the performed measurements.

For claims 35 & 44, see claim 8.

For claims 36-45, see claim 9.

For claim 46, in addition to the above, Beck further teaches samples individual ingredients of a food mixture which make up the solid feed, wherein the sampling of the individual ingredients of the food mixture is performed before the individual ingredients are mixed together. [0025][0027]. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the analyzer device of

Burghardi et al. as modified by Pratt and Beck performs samples individual ingredients of a food mixture which make up the solid feed, wherein the sampling of the individual ingredients of the food mixture is performed before the individual ingredients are mixed together as further taught by Beck, in order to assure that the ingredients are safe and accurate for the animal to consume.

For claim 47, Burghardi et al. as modified by Pratt and Beck further teaches wherein the mixing is performed based on a result of a measurement of the samples (from Beck).

**Claims 18,19,31-33,41,42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burghardi et al. as modified by Pratt as applied to claims 1,2,26 above, and further in view of Birk (7308866).**

Burghardi et al. as modified by Pratt are silent about wherein said feeding device is a vehicle filled with said solid feed, and said analyzer device is provided at said vehicle for measuring the amount of said constituent of said solid feed; wherein said feeding device is an in-door feed wagon mounted on a raft in a ceiling, for automatic feeding.

Birk teaches a feeding system for feeding animals on a farm wherein said feeding device is a feed wagon 38, preferably an in-door feed wagon mounted on a raft in a ceiling, for automatic feeding. It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ a feed wagon as taught by Birk in the system of Burghardi et al. as modified by Pratt, in order to automatically dropping feed into a feeding table, manger, etc. without having to use a vehicle.

**Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Burghardi et al. as modified by Pratt as applied to claim 1 above, and further in view of Cheung (2003/0230245).**

Burghardi et al. as modified by Pratt are silent about a device for measuring a quality of manure from said animals, wherein the control device is configured to control said feeding device to feed said animals depending on the measured quality of manure from said animals.

Cheung teaches a device for measuring a quality of manure from said animals, wherein the control device is configured to control said feeding device to feed said animals depending on the measured quality of manure from said animals ([0013][0022]). It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ a device for measuring a quality of manure from said animals as taught by Cheung, wherein the control device Burghardi et al. as modified by Pratt be configured to control said feeding device to feed said animals depending on the measured quality of manure from said animals, in order to reduce odor from the animals' waste.

**Claim 49 is rejected under 35 U.S.C. 103(a) as being unpatentable over Burghardi et al. as modified by Pratt as applied to claim 1 above, and further in view of Cureton et al. (6901369).**

Burghardi et al. as modified by Pratt are silent about an optical device with image processing capabilities for measuring the actual feed consumption in connection with each of the feedings.

Cureton et al. teach an optical device (99) with image processing capabilities for measuring the actual feed consumption in connection with each of the feedings. It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ an optical device as taught by Cureton with image processing capabilities for measuring the actual feed consumption in connection with each of the feedings in the system of Burghardi et al. as modified by Pratt in order to monitor the feed consumption by the animals.

**(10) Response to Argument**

**Appellant argued that, for claims 1 and 26, appellant respectfully disagrees because Burghardi is completely silent, based on paragraphs [0019], [0020], and [0021] and/or any portion of Burghardi, of teaching or suggesting that the analyzer device measures in real time or near real time the amount of at least one constituent of solid feed to be fed to said animals [of said farm].**

From para. [0020] of Burghardi, they clearly teach that their system is on-farm site to create feed ration at that instant for the animal, which clearly means that it is in real time (see also figures 1-3). In addition, Burghardi's system is a highly automated system which involves computer, which we all know that computer operates in real time. Moreover, the claimed language indicates "near" real time, which covers all ranges beside real time. Thus, even if Burghardi teaches mixing the feed one day later, it is still "near real time".

**Appellant argued that, for claims 1 and 26, although Burghardi discusses considering nutritional information, Appellant has not found that Burghardi discloses how the nutrient information for the available feed ingredients are determined. Therefore, Appellant has not found that Burghardi discloses any analyzer device measuring the recited constituents of solid feed.**

Again, clearly from para. [0019] to [0021] of Burghardi, they teach how the nutrient information are determined based on the animal's evaluation criteria. For example, para. [0022] discusses weight of the animal; a desired weight of the animal; an environment of the animal; a feed form; an actual or desired production level of the animal; and a relationship of animal muscle to fat of the animal, to design a desired or custom feeds for that particular animal. In addition, from TABLEs 1-2, Burghardi teaches how the feed ingredients are generated based on the evaluation data from the animal to create a custom feed.

**Appellant argued that, for claims 1 and 26, the Examiner acknowledges that Burghardi does not teach the analyzer device [being controlled] to repeatedly measure the amount of the constituent of the solid feed at least once a day. There would be no reason for Burghardi to control an analyzer device to repeatedly measure the amount of the constituent of the solid feed at least once a day, because Burghardi relies on standard nutritional values for available feed ingredients. Pratt, however, does not disclose actually analyzing the feed that will be fed to the cattle. Pratt does not disclose an analyzer device for at least daily real-time measuring the amount of the constituent of the solid feed, or of**



**any analyzer device for measuring in real time an amount of at least one constituent of solid feed to be fed to animals of a specific farm**

Repeated measures of amount of constituent for feeding animal is of nothing new in the art (as taught or demonstrated by Pratt), especially when the owner is raising livestock (such as that of Burghardi) because the owner has to maintain the animals weight and health in order to produce higher yield for the market place. It would be highly unlikely that Burghardi just weigh the animal once in its life cycle for mixing the right feed ration. In any event, Pratt teaches repeated measurements (paras. [0131][0138][0153][0231]); thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the control device of Burghardi et al. be configured to control the analyzer device to repeatedly measure the amount of the constituent of the solid feed at least once a day, and configured to control the feeding device to feed said animals repeatedly and at each instance based on the previous said repeatedly performed measurements as taught by Pratt in order to provide updated data about the animal so as to provide appropriate feed to the animal. Pratt was not relied on for an analyzer or replacing Burghardi's analyzer with Pratt's analyzer. Pratt was relied on for the concept of repeated measuring an animal's criteria in order to provide updated data about the animal so as to provide appropriate feed to the animal.

**Appellant argued that, for claims 1 and 26, Pratt does not disclose actually analyzing the feed that will be fed to the cattle; does not disclose daily real-time measuring the amount of the constituent of the solid feed; and does not disclose measuring in real time an amount of at least one constituent of solid feed to be**

**fed to animals of a specific farm. Accordingly, it follows that Pratt cannot disclose a control device configured to control the feeding device to feed said animals repeatedly and at each instance based such repeatedly performed measurements.**

First, the claimed language indicates functional recitation of a control device, i.e. a computer, to which most (if not all) computer systems are certainly capable of being programed to perform such function as intended by appellant. Second, even though Pratt was not relied on for an analyzer teaching, Pratt does teach that the control device or computer configured to control an analyzer device (the program in the computer system to performing the feeding function) that is able to repeatedly measure constituent of feed for at least one day as stated in the above rejection. Specifically, the examiner relied on Pratt for the concept of having repeated measurements within Pratt's computer system to measure animal's information in order to provide updated data about the animal so as to provide appropriate feed to the animal. Note that Burghardi already teaches the analyzer device and the control device, thus, the examiner did not replace Burghardi's analyzer and control devices with that of Pratt as appeared to be interpreted by appellant. Instead, the examiner is saying that the concept of repeated measurements (as taught by Pratt) of animal information to determined feed ration is known concept, thus, one of ordinary skill in the art would provide such repeated measurements in the system of Burghardi in order to provide updated data about the animal so as to provide appropriate feed to the animal.

**Appellant argued that with respect to dependent claims 2 and 37, Appellant respectfully submits that this claim recites that the control device is configured to control said analyzer device to measure the amount of said constitute of said solid feed immediately prior to the feeding of said animals. The Examiner asserts that Burghardi paragraphs [0018], [0020], [0021], [0024], [0025], and [0032]-[0036] satisfy this feature. These passages concern creating a customized feed involving the processing and manipulating of data relating to the characteristics of the animals. Appellant respectfully asserts that there is no description or discussion of measuring the amount of constituent of the feed immediately prior to feeding the animals.**

Clearly from these paragraphs, Burghardi teaches measuring the amount of constituent of the feed immediately prior to feeding the animals because that is how Burghardi creates a "custom feed" ration for the animal. Constituents as defined by appellant are any one of protein, fiber, NDF contents, to which Burghardi teaches the nutrients profile TABLES 1-9 and para. 0038. The animal data is obtained (para. 0022), then this information is used to design custom rations or custom feeds for the animal. This is all clearly explained in Burghardi.

**Appellant argued that from claims 52,53,54, it is clear that at least the animals, the analyzer device, and the feeding device are in situ. The phrase "are in situ" requires these three elements, i.e., the animals, the analyzer device, and the feeding device, all be on the farm housing and feeding the animals. For claim 52, the animals, the analyzer device, and the feeding device are co-located.**

Burghardi teaches his system on-farm site because all the ingredients are mixed there by the computer system (which has the analyzer to read data from the animal criteria in order to mix the appropriate feed ration or custom feed) and then feed to the animal at the farm. Certain ingredients may be at a supplier's mill site (as stated in para. 0020) but as far as the three elements listed by appellant, these elements are on site at the farm in Burghardi's system. As for the real time argument, please see response above.

**Appellant argued that, for claims and 38, these claims recite that the control device is configured to control said analyzer device to measure the amount of said constituent of said solid feed a plurality of times per day. The Examiner asserts that the Pratt reference teaches this feature. Appellant respectfully disagrees. The Examiner has not identified where Pratt makes this disclosure and Appellant cannot find any such disclosure.**

The examiner has identified Pratt's teaching as stated in the above rejection and response, thus, please see above.

**Appellant argued that, for claim 6, claim 6 recites that the control device is configured to control said analyzer device to measure the amounts of a plurality of constituents of said solid feed, and configured to control said feeding device to feed said animals depending on the measurements of the amounts of the constituents of said solid feed. The Examiner relies on Burghardi paragraph [0038] .**

First, as explained in the above, the "configured to" language is merely a functional recitation, to which the computer system of Burghardi is certainly capable of being programmed to perform such intended function. In addition, clearly taught by Burghardi throughout his patent, the system is a highly automated system in which a computer with its analytic program built therein to analyze the animal's information or criteria such as weight, genotype, lactation, etc., and from these data, the computer is able to derive a custom feed for the specific criteria of the animal. As listed in para. 0038, constituents such as protein, fiber, mineral, etc. (which at least protein and fiber are the same as claimed by appellant) are derived based on the animal's information to obtain a custom feed for that particular animal. This is the same concept as claimed by appellant.

**Appellant argued that, for claim 7, claim 7 recites that the control device is configured to control said feeding device to perform said feeding depending on an average value of said repeatedly measured amounts of said constituent. The Examiner relies on Burghardi paragraph [0032]. This paragraph discloses using two criteria, but does not disclose using "an average value of said repeatedly measured amounts of said constituent."**

Burghardi stated "ration data based on weighted average of more than one evaluation criteria", which weighted average is average value to determine amounts of constituent in the ration for the animal custom feed.

**Appellant argued that, for claims 10, 11, 13, the phrase "performed measurements" means the measurements of the "analyzer device for measuring**

**in real time or near real time an amount of at least one constituent of solid feed to be fed to said animals", wherein the amount of said constituent includes any one of a protein content, a fiber content, and a neutral detergent fiber (NDF) content". Appellant does not find that Burghardi teaches these features insofar as Burghardi, properly modified, does not teach the "performed measurements" of the feed to be fed to the animals on the farm, or to direct a feeding device based on "performed measurements" of the feed being fed to the farm's animals.**

The analyzer comment has been explained in the above, thus, please see above. As for the protein, fiber and NDF contents, appellant claims at least one of, thus, from Burghardi's para. 0038, he teaches at least one of protein and fiber.

**Appellant argued that claim 14 recites said animals being grouped in different groups depending on body condition and, provided that the animals are milking animals, depending on milk production, days in lactation, or number of lactations. Although Pratt does disclose grouping animals, Pratt does not disclose grouping of milking animals depending on milk production, days in lactation, or number of lactations.**

The claim calls for body condition, thus, at least paras. 0234,0243 of Pratt discusses grouping by body condition such as weight gain, fat, sex, age, etc.

**Appellant argued that claim 23 recites that the control device is configured to control said analyzer device to measure the amount of the constituent of the solid feed repeatedly and at least once a day automatically. The Examiner relies**

**on Pratt paragraphs [0131], [0138], [0153], and [0023]. Appellant respectfully submits that Pratt does not disclose this feature.**

The argument has been addressed in the above response, thus, please see above.

**Appellant argued that claim 24 recites that the control device is configured to control the feeding device to feed the animals repeatedly and at each instance depending on the last one of the repeatedly performed measurements automatically. The Examiner relies on Pratt paragraphs [0131], [0138], [0153], and [0023]. Appellant respectfully submits that Pratt does not disclose this feature.**

The argument has been addressed in the above response, thus, please see above.

**Appellant argued that claim 27 recites that an analyzer control device to control the analyzer device to measure the amount of the constituent of the solid feed repeatedly and at least once a day; and a feed control device for controlling the feed device to feed said animals repeatedly and at each instance based on the previous said repeatedly performed measurements. Appellant respectfully submits that the two applied references do not disclose these features.**

The argument has been addressed in the above response, thus, please see above.

**Appellant argued that claims 28 and 29 recite that the control device is configured to control the analyzer device to measure the amount of the constituent of the solid feed at least three times per day. The Examiner argues**

**that this is just “routine experimentation” to discover the optimum/workable range until the desired effect is achieved (citing to In re Aller) but fails to relate the In re Aller principle to the facts of this claim.**

As stated in the above rejection, through general routine testing and experimentation, one of ordinary skill in the art would derived at certain range, depending on the animal's health being feed.

**Appellant argued that claims 29, 40, and 48 recite that the analyzer device measures the amount of at least one constituent of solid feed to be feed to the animals at different locations in a feed supply device. The Examiner relies on paragraphs [0020], [0030], [0037], and [0041] of Burghardi.**

The argument has been addressed in the above response, thus, please see above.

**Appellant argued that claims 34 and 43 recite that the analyzer device measures all of the constituents (a protein content, a fiber content, and a neutral detergent fiber (NDF) content) of the solid feed to provide more accurate ration balancing and maximized production. The Examiner relies on paragraphs [0020], [0021], [0025], [0032]-[0036], and [0038] of Burghardi. Appellant respectfully submits that the cited paragraphs do not disclose these features.**

Para. 0038 stated grain, protein sources, which are fiber and protein contents.

**Appellant argued that claim 50 recites that different groups of animals are fed with total mixed rations of feed, independently, and at each instance, depending on the measured amount of the at least one constituent of solid feed.**



**The Examiner asserts that Burghardi, modified by Pratt, would satisfy this feature. Appellant respectfully disagrees. The Examiner has not shown that the references teach this feature.**

As stated in the rejection, Pratt teaches different groups of animals being fed with the mixed rations.

**Appellant argued that, for claims 4, 8, 9, 12, 15, 16, 35, 36, and 44-47, Beck discloses ensiled feed [0003] and use of near infrared reflectance spectroscopy (NIRS) [0008], [0039] for analyzing feed. Beck does not otherwise cure the defects of Burghardi and Pratt. Beck does not suggest to use NIRS in the manner recited by the independent claims.**

Beck teaches a feeding system for feeding animals wherein said analyzer device is a spectroscopic device/near infrared (NIR) instrument for quantitative chemical analysis ([0008][0039][0043]). It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ a spectroscopic device as taught by Beck in the system of Burghardi et al. as modified by Pratt, in order to provide a nondestructive, rapid, accurate and precise determination of the chemical composition of forages and feedstuffs for the animals.

**Appellant argued that claims 18, 31, 32, and 41 recite said feeding device is a vehicle filled with said solid feed, and said analyzer device is provided at said vehicle for measuring the amount of said constituent of said solid feed. The applied references do not teach said analyzer device, as recited, provided at said vehicle for measuring the amount of said constituent of said solid feed. Appellant**

**respectfully urges that claims 18, 19, 31-33, 41, and 42 are patentable over the combination of Burghardi and Pratt, and Birk for its own merits, as well as by virtue of their dependency on independent claim 1 or 26.**

Birk teaches a feeding system for feeding animals on a farm wherein said feeding device is a feed wagon 38, preferably an in-door feed wagon mounted on a raft in a ceiling, for automatic feeding. It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ a feed wagon as taught by Birk in the system of Burghardi et al. as modified by Pratt, in order to automatically dropping feed into a feeding table, manger, etc. without having to use a vehicle.

**Appellant argued that the fourth ground of rejection under appeal is whether claim 22 under 35 U.S.C. §103(a) is obvious over Burghardi in view of Pratt and further in view of Cheung. Cheung relates to biological compositions that can reduce the production of odorous waste products by animals, which biological compositions can be added to animal feed to reduce the odor of waste products prior to the shedding of the waste products by the animal [0012]. Claim 22 is non-obvious at least for depending from a non-obvious claim.**

Cheung teaches a device for measuring a quality of manure from said animals, wherein the control device is configured to control said feeding device to feed said animals depending on the measured quality of manure from said animals ([0013][0022]). It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ a device for measuring a quality of manure from said animals as taught by Cheung, wherein the control device Burghardi et al. as

modified by Pratt be configured to control said feeding device to feed said animals depending on the measured quality of manure from said animals, in order to reduce odor from the animals' waste.

**Appellant argued that the fifth ground of rejection under appeal is whether claim 49 under 35 U.S.C. §103(a) is obvious over Burghardi in view of Pratt and further in view of Cureton. Claim 49 recites an optical device with image processing capabilities for measuring the actual feed consumption in connection with each of the feedings. Cureton discloses camera system 99 mounted on a remotely-controlled feed delivery vehicle, allowing a remote operator to interact with a VR model of the remotely controlled feedlot vehicle (FIGS. 2B2, 2CI, 2DI and 2EI). It does not appear, however, that the camera system 99 has "capabilities for measuring the actual feed consumption in connection with each of the feedings".**

Cureton et al. teach an optical device (99) with image processing capabilities for measuring the actual feed consumption in connection with each of the feedings. It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ an optical device as taught by Cureton with image processing capabilities for measuring the actual feed consumption in connection with each of the feedings in the system of Burghardi et al. as modified by Pratt in order to monitor the feed consumption by the animals. A camera system is capable of measuring the actual feed consumption based on the image taken and then calculating the area which is occupied by the feeds left in the feeding bunker.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

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Trinh T. Nguyen /TTN/